

REMARKS

The application has been reviewed in light of the final Office Action dated January 5, 2005. Claims 1-13 and 15-40 are pending, with claims 1, 2 and 13 being in independent form. Claim 14 was previously canceled, without prejudice. The Office Action states that claims 2-12 and 32-36 are allowed. By this Amendment, claims 1 and 13 have been amended to clarify the claimed invention.

Claims 1, 13, 15, 16, 25 and 37-40 were rejected under 35 U.S.C. §102(b) as purportedly anticipated by U.S. Patent No. 5,999,220 to Washino. Claims 17-23 and 27-29 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Washino in view of U.S. Patent No. 4,963,995 to Lang.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1 and 13 are patentable over the cited art, for at least the following reasons.

This application relates to editing systems for moving images. In many instances, source video material is in a format (such as film) other than the target format, and/or need to be prepared/edited for multiple standards (e.g., NTSC, PAL, etc.) which have different frame rates and different lines per frame. Therefore, the source material must be converted to the target format in order to produce a master tape. However, once a program is converted from film to NTSC format or PAL format, it is not easy to convert the program to the other format. Therefore, the process of conversion followed by editing is often repeated for each format (i.e. NTSC and PAL). However, the edits for one format cannot simply be repeated to achieve identical effects for the other format.

This application is directed to improvements to editing systems, devised by Applicant. For example, source material (image data representing a sequence of image frames which

together form a moving image) is stored in a frame-random access store in an input format as captured, to preserve quality, and yet allowing it to be edited with data of other formats and output in another format as desired, in a single apparatus. The input format is defined by frame rate and a multiplicity of image lines. Each of independent claims 1 and 13 includes these features.

For example, independent claim 1 is directed to an editing system for moving images which comprises a frame-random access store, an input circuit, an editing processor and an output circuit, wherein the frame-random access store stores image data representing a sequence of image frames which together form a moving image, the store storing data in an input format as captured, such that the frames can be accessed in a random order.

Independent claim 13 is directed to an editing system in which image data representing an initial moving image captured at a first frame rate are input in a first format, defining the first frame rate and a first multiplicity of image lines, at a corresponding rate is stored in a store in the first format.

Washino, as understood by Applicant, is directed to a multi-format audio/video production system wherein an input program is converted into a required format upon input into the system. In particular, Washino suggests compressing the input program for storage.

Applicants do not find teaching or suggestion in Washino of an editing system as provided by the claimed invention of this application, including a frame-random access store which stores image data representing a sequence of image frames which together form a moving image, wherein the store stores data in an input format as captured, such that the frames can be accessed in a random order.

Column 10, lines 20-45 of Washino describes retrieving data from the store and subsequently performing signal conversion. However, the preceding passage of Washino, that is,

column 9, line 47 to column 10, line 19, explicitly states that the program signal is first provided to a signal compressor which compresses the signal to reduce the effective data rate, utilizing any of the commonly used compression schemes, such as JPEG or MEG. It is well known in the art that data compressed using compression techniques such as JPEG or MPEG cannot be stored in a random access store as set out in present claims 1 and 13.

Further, in the compression scheme MPEG, for example, only some of the frames can be reconstructed without any reference to other frames. Most of the frames, however, are either forward predicted from an earlier frame or are both forward and backward predicted from other frames. Applicant submits that data stored using common compression techniques such as JPEG and MPEG-1 or MPEG-2 are not stored in the input format as captured (that is, the data are not necessarily stored at the frame rate and the multiplicity of image lines as captured), and that the compressed data of Washino which is stored before retrieval (and signal conversion if necessary) is not stored in random access stores in the input format as captured and provided to the editing system.

Lang, as understood by Applicant, is directed to an audio/video transceiver apparatus including a capability for editing and/or copying from one video tape to another. Lang was cited for its disclosure of an editing apparatus comprising a VTR for receiving and storing the edited data.

Applicant does not find disclosure or suggestion by the cited art of an editing system (such as described in claim 1 or claim 13) wherein image data representing a moving image input in a first format, defining a first frame rate and a first multiplicity of image lines, at a corresponding rate is stored in a store in the first format as captured, as provided by the claimed invention.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that

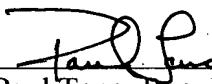
independent claims 1 and 13, and the claims depending therefrom, are patentable over the cited art.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,



Paul Teng, Reg. No. 40,837
Attorney for Applicant
Cooper & Dunham LLP
Tel.: (212) 278-0400